

District 07 Mobility Performance Report

2015 Third Quarter

DEPARTMENT OF TRANSPORTATION

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: Ashraf Armanious

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EXECUTIVE SUMMARY

Overview

Caltrans District 7 contains two counties located in coastal southern California: Los Angeles and Ventura Counties. Both counties are urban counties, with Los Angeles as the most populous county in the United States at almost 10 million residents and Ventura County with 800,000 residents. Although these are urban counties, they do contain a large amount of sparsely populated National Forest and National Recreation Area land.

The Mobility Performance quarterly analysis compares information with over a year ago and over last quarter in the following performance measures:

- Vehicle Miles of Travel (VMT))
- Vehicle Hours of Delay (VHD), Bottleneck Locations
- Lost Lane Miles (equivalent lost productivity)
- Detector Health

This information is based on data collected every day of the quarter, twenty-four hours a day, by automated vehicle detector stations deployed on urban-area freeways where congestion is regularly experienced. The MPR presents congestion information at two speed thresholds: delay from vehicles traveling below 35 miles per hour (mph), and delay from vehicles traveling below 60 mph. The delay at the 35 mph threshold represents severe congestion while delay at 60 mph represents all congestion, both light and heavy. These thresholds are set by Caltrans and are based upon engineering experience and District input.

FINDINGS

In the third quarter, total delay equaled 14.7 million vehicle hours of delay (VHD) at the 35 mph speed threshold, and 31.5 million VHD at the 60 mph threshold. The average weekday delay experienced in this quarter was approximately 203 thousand VHD at 35 mph, and 425 thousand VHD at 60 mph.

Top Ten Bottlenecks for the Quarter 3

Fwy	Approximate Location	Shift	Abs PM	CA PM	# Days Active	Avg Extent (Miles)	Total Delay (veh-hrs)	Avg. Duration (hrs)
I-405-S	Howard Hughes Pkwy	PM	48.672	24.9	64	5.5	261,898	3.7
I-405-N	Nordhoff St.	PM	68.642	44.87	61	5.2	238,547	4.2
I-405-S	Lucerne St / Wilmington Ave	PM	33.802	10.03	64	6.2	219,972	3.8
I-210-E	Azusa Ave	PM	39.999	R39.71	55	7.0	213,524	3.8
I-5-S	Garnish Dr. / Lakewood Blvd	PM	124.37	7.8	51	7.7	181,205	3.3
I-405-N	Waterford/ Wilshire Blvd	PM	55.882	32.11	57	3.8	179,112	4.1
I-405-N	Palms Blvd	AM	52.312	28.54	63	6.6	175,407	2.8
SR-57-N	57/60 Interchange	PM	15.797	R3.98	64	4.2	161,196	4.3
I-605-S	Florence Ave	PM	11.216	R9.164	59	5.2	142,872	3.1
I-110-S	76Th / Manchester Ave	PM	16.51	16.58	58	4.7	141,411	3.4

Quarterly Mobility Statistics

Measure	Graph	Percentage Change									
Vehicle Miles of Travel (VMT)	<p>Miles (Billions)</p> <table><tr><th>Quarter</th><th>VMT (Billions)</th></tr><tr><td>2014 Q3</td><td>9.1</td></tr><tr><td>2015 Q2</td><td>9.2</td></tr><tr><td>2015 Q3</td><td>9.4</td></tr></table>	Quarter	VMT (Billions)	2014 Q3	9.1	2015 Q2	9.2	2015 Q3	9.4	Over one year ago	Over last quarter
		Quarter	VMT (Billions)								
2014 Q3	9.1										
2015 Q2	9.2										
2015 Q3	9.4										
		3.5% ↑	1.6% ↑								
Total Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Millions)</p> <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2014 Q3</td><td>12.5</td></tr><tr><td>2015 Q2</td><td>13.4</td></tr><tr><td>2015 Q3</td><td>14.7</td></tr></table>	Quarter	VHD (Millions)	2014 Q3	12.5	2015 Q2	13.4	2015 Q3	14.7	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2014 Q3	12.5										
2015 Q2	13.4										
2015 Q3	14.7										
		17.6% ↑	9.7% ↑								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 35 mph	<p>Hours (Thousands)</p> <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2014 Q3</td><td>176</td></tr><tr><td>2015 Q2</td><td>181</td></tr><tr><td>2015 Q3</td><td>203</td></tr></table>	Quarter	VHD (Thousands)	2014 Q3	176	2015 Q2	181	2015 Q3	203	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2014 Q3	176										
2015 Q2	181										
2015 Q3	203										
		14.9% ↑	11.7% ↑								
Total Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Millions)</p> <table><tr><th>Quarter</th><th>VHD (Millions)</th></tr><tr><td>2014 Q3</td><td>27.4</td></tr><tr><td>2015 Q2</td><td>29.3</td></tr><tr><td>2015 Q3</td><td>31.5</td></tr></table>	Quarter	VHD (Millions)	2014 Q3	27.4	2015 Q2	29.3	2015 Q3	31.5	Over one year ago	Over last quarter
		Quarter	VHD (Millions)								
2014 Q3	27.4										
2015 Q2	29.3										
2015 Q3	31.5										
		15.1% ↑	7.7% ↑								
Average Non-Holiday Weekday Vehicle Hours of Delay (VHD) at 60 mph	<p>Hours (Thousands)</p> <table><tr><th>Quarter</th><th>VHD (Thousands)</th></tr><tr><td>2014 Q3</td><td>380</td></tr><tr><td>2015 Q2</td><td>390</td></tr><tr><td>2015 Q3</td><td>425</td></tr></table>	Quarter	VHD (Thousands)	2014 Q3	380	2015 Q2	390	2015 Q3	425	Over one year ago	Over last quarter
		Quarter	VHD (Thousands)								
2014 Q3	380										
2015 Q2	390										
2015 Q3	425										
		12% ↑	9.1% ↑								

Measure	Graph	Percentage Change	
Average Vehicle Hours of Delay by Day of Week at 60 mph		Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		–	Sun/Hol -7.8%
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Tuesday 17.3%	Friday 17.2%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Weekdays		Largest Magnitude Weekday Decrease over one year ago	Largest Magnitude Weekday Decrease over last quarter
		11 PM -10.9%	3 AM -44.1%
		Largest Magnitude Weekday Increase over one year ago	Largest Magnitude Weekday Increase over last quarter
		4 PM 13.7%	6 PM 19%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Saturdays		Largest Magnitude Saturday Decrease over one year ago	Largest Magnitude Saturday Decrease over last quarter
		8 PM -20.1%	9 AM -42.2%
		Largest Magnitude Saturday Increase over one year ago	Largest Magnitude Saturday Increase over last quarter
		4 PM 73.2%	5 PM 8.3%
Average Vehicle Hours of Delay by Hour of Day at 35 mph, Sundays/Holidays		Largest Magnitude Sun./Holiday Decrease over one year ago	Largest Magnitude Sun./Holiday Decrease over last quarter
		11 PM -44.2%	3 PM -22.7%
		Largest Magnitude Sun./Holiday Increase over one year ago	Largest Magnitude Sun./Holiday Increase over last quarter
		1 PM 80.5%	11 AM 13%

Measure	Graph	Percentage Change	
Total Vehicle Hours of Delay (VHD) by County at 35 mph	<p>Hours (Millions)</p> <p>2014 Q3 2015 Q2 2015 Q3</p> <p>Los Angeles Ventura</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	—
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		Los Angeles 16.9% ↑	Los Angeles 9.9% ↑
Average Non-Holiday Weekday Equivalent Lost Lane Mile Hours at 35 mph	<p>Miles</p> <p>2014 Q3 2015 Q2 2015 Q3</p> <p>AM Peak (6 AM to 10 AM) Off-Peak Day (10 AM to 3 PM) PM Peak (3 PM to 7 PM) Off-Peak Night (7 PM to 6 AM)</p>	Largest Magnitude Decrease over one year ago	Largest Magnitude Decrease over last quarter
		—	—
		Largest Magnitude Increase over one year ago	Largest Magnitude Increase over last quarter
		PM Peak 12.4% ↑	PM Peak 5.1% ↑
Average Number of Good and Bad Detectors	<p>Number of Detectors</p> <p>Average of Good Average of Bad</p> <p>2014 Q3 2015 Q2 2015 Q3</p>	Change in Good over one year ago	Change in Good over last quarter
		-5% ↓	-4.6% ↓
		Change in Bad over one year ago	Change in Bad over last quarter
		14% ↑	7.7% ↑

Congestion by Route											
Route	County	Vehicle Hours of Delay at 35 mph			Difference 2015 Q3-2014 Q3		Difference 2015 Q3-2015 Q2		Rank		
		2014 Q3	2015 Q2	2015 Q3	Absolute	Percentage	Absolute	Percentage	2014 Q3	2015 Q2	2015 Q3
I-405	Los Angeles	1,971,778	1,902,531	2,809,670	837,892	42.5%	907,139	47.7%	1	1	1
I-10	Los Angeles	1,811,351	1,803,968	1,870,720	59,369	3.3%	66,752	3.7%	2	2	2
US-101	Los Angeles	1,674,815	1,677,112	1,853,079	178,265	10.6%	175,968	10.5%	3	3	3
I-5	Los Angeles	1,290,581	1,445,798	1,454,143	163,561	12.7%	8,345	0.6%	4	4	4
I-110	Los Angeles	915,716	1,110,246	1,123,541	207,825	22.7%	13,295	1.2%	6	5	5
I-210	Los Angeles	940,312	1,043,236	1,012,041	71,729	7.6%	-31,195	-3.0%	5	6	6
SR-60	Los Angeles	592,706	870,828	887,945	295,239	49.8%	17,118	2.0%	7	7	7
I-605	Los Angeles	590,382	742,836	732,800	142,418	24.1%	-10,036	-1.4%	8	8	8
SR-91	Los Angeles	581,990	500,271	533,209	-48,780	-8.4%	32,938	6.6%	9	9	9
I-105	Los Angeles	494,975	498,145	521,367	26,392	5.3%	23,221	4.7%	10	10	10
SR-57	Los Angeles	354,462	402,652	429,485	75,023	21.2%	26,833	6.7%	11	11	11
US-101	Ventura	177,173	332,933	331,154	153,981	86.9%	-1,779	-0.5%	15	12	12
I-710	Los Angeles	248,663	317,829	274,675	26,012	10.5%	-43,155	-13.6%	12	13	13
SR-134	Los Angeles	234,703	218,997	257,033	22,330	9.5%	38,035	17.4%	13	14	14
SR-170	Los Angeles	204,000	136,527	158,924	-45,076	-22.1%	22,396	16.4%	14	15	15
SR-14	Los Angeles	113,917	116,695	149,851	35,934	31.5%	33,156	28.4%	16	16	16
SR-118	Los Angeles	106,619	78,596	98,896	-7,722	-7.2%	20,301	25.8%	17	18	17
SR-71	Los Angeles	59,605	114,678	98,299	38,694	64.9%	-16,379	-14.3%	18	17	18
SR-2	Los Angeles	56,127	44,022	52,469	-3,659	-6.5%	8,446	19.2%	19	19	19
SR-23	Ventura	15,735	12,868	39,818	24,083	153.0%	26,950	209.4%	21	21	20
SR-47	Los Angeles	3,553	2,327	1,118	-2,435	-68.5%	-1,209	-51.9%	22	22	21
SR-90	Los Angeles	298	307	488	190	63.8%	181	59.1%	23	23	22
SR-118	Ventura	55,635	15,463	402	-55,232	-99.3%	-15,061	-97.4%	20	20	23
TOTALS		12,495,094	13,388,865	14,691,125	2,196,031	17.6%	1,302,259	9.7%			

SR-118 Ventura in 2015-Q3 and 2015-Q2 compared to 2014-Q3, delays are effected due to the detectors missing data (almost 1% data observed)

SR-90 Los Angeles 2015-Q3 about 59% difference from previous Quarter is relative to the small number of delay (307 VHD).

SR-47 Los Angeles 2015-Q3 drop in delays is due to detectors health (3-weeks in Q3 loops were out)